From: william_mcqueen@apl.com@inetgw

To: Microsoft ATR

Date: 1/28/02 6:23pm

Subject: Microsoft Settlement

In paragraph 4 of the complaint, you should have mentioned that the reason there is no potential threat to Microsoft's operating system monopoly from direct competition by existing operating systems is that Microsoft has already eliminated any competing operating systems on the Intel platform from the market by it's anti-competitive practices. Check and see if you have any comments from Gary Kildall formerly of Digital Research.

Time does not permit me to present a detailed history of the events, but a short history shows that Microsoft has been engaged in business practices of questionable ethics since the early 1980s.

When the group at IBM who designed the original IBM PC was looking for an operating system, they were in talks with Gary Kildall of Digital Research to port his CP/M (Control Program for Microprocessors) from the Intel 8080 and Zilog Z80 platform to the Intel 8086/8088 platform for the IBM PC. One version has it that they were in final negotiations with DR when Gary Kildall left for a skiing vacation with the understanding that things would be finalized at a meeting the following Monday. The folks at IBM called to get in touch with Gary over the weekend and couldn't get a hold of him. Bill Gates found out about this because IBM was negotiating with him for a version of his MBasic to use as a basic interpreter in their system ROM. IBM told them of their problems with getting in touch with Gary Kildall that weekend. Bill Gates told them he had an alternative O/S waiting in the wings. This was not, in fact, the case; but he knew that a small company called Seattle Computer had already ported CP/M to the 8086 so that they could have an O/S for their computer. The story goes that Bill Gates bought Seattle Computer for \$10,000 or \$15,000 and sold the O/S called SC/DOS to IBM as MS/DOS and entered into a license agreement with IBM that allowed Microsoft to sell the O/S as MS/DOS while IBM sold the O/S as IBM/DOS. When Gary Kildall arrived in his office the following Monday, he called IBM only to find that they had already licensed the rights to modify and use MS/DOS from Microsoft. Digital Research marketed CP/M86 and C/Basic86 for use as an alternative O/S for the IBM/PC but it never got very much market share because IBM/DOS was part of the bundle shipped with every PC and a version of MS Basic was burned into every system ROM.

Later, about the time that Microsoft was shipping MS/DOS version 5, Digital Research released a competing product called DR/DOS 7. At the time, Lotus, Intel and Microsoft had published a memory specification called LIM/EMS which allowed Lotus 123 to use more than the 640 megabytes of main system memory on an IBM PC or clone to store data. A

little company called Quarterdeck had figured out a way of intercepting LIM/EMS system calls to use the Extended Memory available on a 80186 or 80286 system as LIM/EMS memory. At the time, Microsoft did not worry much about Quarterdeck shipping a memory manager as an add-on to MS/DOS but when Digital Research figured out how to incorporate those features (and others) into DR/DOS 7 something had to be done. Microsoft entered into agreements with companies like Compaq Computer that they would ship MS/DOS exclusively with their products. If Microsoft found that any vendor was shipping products with any competing O/S then Microsoft would charge them the retail rate for every copy of MS/DOS that the company shipped with their computers. DR/DOS enjoyed a strong after-market with hobbyists and systems integrators who wanted a superior Operating System but it wasn't enough to sustain their business in the face of the competition from Microsoft's exclusive agreements with the hardware vendors. Now, I think you will find that both Quarterdeck and Digital Research are not much more than footnotes in the history of the Personal Computer.

Another Digital Research product, Gem, was a Graphical User Interface (GUI) that was once used by one of the two leading Desktop Publisher software packages as the user interface. I don't remember the details of this case, but this software vendor was convinced that they would have greater market share if they converted their package to work with Microsoft Windows 2.0. After that, Gem was no longer bundled with the Desktop Publishing software and Gem dropped out of site.

One can only speculate on what the state-of-the-art for personal computing devices would be now if Microsoft had not created this monopoly market for it's operating system products. We are only now beginning to see enhancements such as voice and handwriting recognition technology. These are just two examples of technology that would have been in widespread use years ago if Microsoft had had competition in it's markets. I believe that every consumer of electronic devices such as telephones, personal computers and other consumer electronic devices has been harmed by the lack of choices and innovation in the markets of Operating Systems and productivity software over the last two decades. To give Microsoft significant market share in one of the few areas they have not been able to gain market share on their own, the educational market, is not a fair settlement.

Also, if you look at where Microsoft has focused it's strategy since they were brought to trial, you will see that they have shifted their restrictive licensing policies from the manufacturers to the end-users. The press is filled with many examples of complaints from Corporate IT executives about the restrictive enterprise licensing agreements that Microsoft is forcing them into. Microsoft has also designed their latest Operating System, Windows XP, so that you must supply them with a hardware 'signature' in order to continue using

that software beyond the introductory period. This feature also restricts you from installing this software on more than one computer. Microsoft is also engaging in litigation to prevent a competing O/S said to be capable of running some software designed for older versions of Microsoft Windows from ever coming to market. There seems to be very little in the settlement to prevent Microsoft from continuing these anti-competitive practices that have stifled the market.

Again, I wish that I had more time to substantiate some of the history that I have recalled or to suggest areas where the settlement could be improved but I work in a corporate IT department supporting Microsoft's products. The complex, buggy nature of these products takes up so much of my time that I have not had time to make a better comment before today's deadline. You may find that there are many other people in corporate IT that wish Microsoft didn't have the monopoly in the markets they do have so that they could choose better software for their companies.

Sincerely,

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